

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 33

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID M. ALLGEIER, FLOYD JONES,
ROBERT L. PROTHEROE and JOHN F. CROOKS

Appeal No. 99-0890
Application 07/575,096¹

ON BRIEF

Before FLEMING, HAIRSTON and DIXON, **Administrative Patent Judges.**

FLEMING, **Administrative Patent Judge.**

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 17, 19-24, 26, 27, 53-60, 70-123, all of the claims pending in the present application. Claims 1-16, 18, 25 28-52, and 61-69 have been canceled.

¹ Application for patent filed August 30, 1990

The invention relates to a method and system for processing signature-based payment transactions in which merchant's records of payment can be generated and maintained electronically without generation of paper records, while providing paper records to customers (specification, page 1, lines 3-9). The system includes a cashier-operated point of sale terminal (figure 5, numeral 62) on which data relating to transactions for items can be entered (specification, page 9, lines 33-34), and a card reader (figure 5, numeral 32) for entry of customer account information (figure 7A, numeral 88). A write input device (figure 5, numeral 20) having a touch sensitive display screen (figure 2, numeral 46), includes a digitizer (figure 5, numeral 26) for entry of handwritten transaction signature data (specification, page 7, lines 16-25), and a display (figure 5, numeral 48) for displaying the signature and business form (specification, page 2, lines 7-12; page 7, lines 16-25). A printer (figure 5, numeral 22) prints a receipt of the transaction, including a description of the purchased items, customer account information, and a representation of the signature (figure 6). A storage medium (figure 5, numeral 64) stores the signature data and receipt data for later retrieval

(specification, page 13, lines 33-35). Circuitry couples the point of sale terminal to the digitizer, display, printer, card reader and storage medium (figure 5).

Independent claim 17 is reproduced as follows:

17. A method for processing customer charge transactions in an establishment using apparatus which includes a cashier-operated point of sale (POS) terminal, a printer and a customer-operated write input device having a touch-sensitive display screen and a card reader, comprising the following steps:

- (a) initiating the start of a transaction by the cashier;
- (b) entering data concerning items of the transaction including a last item into the POS terminal by the cashier;
- (c) indicating entry of the last item of the transaction by the cashier;
- (d) entering customer account data by the cashier;
- (e) displaying a business form which includes transaction item data and customer account data on the touch-sensitive display screen of the write input device;
- (f) signing a signature by the customer on the touch-sensitive display screen of the business form displayed there;
- (g) communicating combined business form and signature information to a storage medium for later retrieval; and
- (h) printing at least a portion of the business form displayed.

The Examiner relies on the following reference:

Dunkley et al (Dunkley)	4,752,965	Jun. 21, 1988
Johnston et al (Johnston)	4,814,760	Mar. 21, 1989
Iggulden et al (Iggulden)	4,918,723	Apr. 17, 1990

Claims 17, 19-24, 26, 27, 53-60 and 70-118 stand rejected under 35 U.S.C. § 103 as being unpatentable over Dunkley when taken with Iggulden.

Claims 119-123 stand rejected under 35 U.S.C. § 103 as being unpatentable over Dunkley when taken with Iggulden and Johnston.

Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the Brief² and Supplemental Appeal Brief³, and the Examiner's Answer⁴ for the respective details thereof.

OPINION

We will not sustain the rejections of claims 17, 19-24, 26, 27, 53-60, and 70-123 under 35 U.S.C. § 103.

The Examiner has failed to set forth a ***prima facie*** case. It is the burden of the Examiner to establish why one having

²The Brief was received June 28, 1996.

³The Supplemental Brief was received May 11, 2001.

⁴The Examiner's Answer was mailed March 3, 1998. Contrary to the requirements of MPEP 1208 the Examiner incorporates in his Answer (page 3, section 9) the statements of the grounds of rejection by referencing two prior actions (paper numbers 27 and 23). As the final rejection (paper number 27) incorporates by reference the rejections set forth in the preceding Office action (paper number 23), and the basis of the Examiner's rejections are clear, this case was not remanded to the Examiner to take corrective action.

ordinary skill in the art would have been led to the claimed invention by the express teachings or suggestions found in the prior art, or by implications contained in such teachings or suggestions. ***In re Sernaker***, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). "Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." ***Para-Ordnance Mfg. v. SGS Importers Int'l, Inc.***, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), ***cert. denied***, 117 S.Ct. 80 (1996) ***citing W. L. Gore & Assocs., Inc. v. Garlock, Inc.***, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), ***cert. denied***, 469 U.S. 851 (1984).

On page 7 of the Supplemental Appeal Brief (hereinafter "brief"), Appellants argue that Dunkley fails to teach Appellant's claim limitations. In particular, Appellants argue that Dunkley teaches signature verification rather than reproduction of a signature on a receipt and does not show or suggest the method steps called for in the claims.

Appellants further argue that neither Dunkley nor Iggulden discloses steps (e), (f) and (g) of claim 17, which Appellants assert are "the heart of the claim". Appellants state (brief,

pages 9-11) that independent claims 27, 78, 91, 93, 102 and 112 are allowable as the same reasons associated with claim 17 are applicable to these latter claims.

As to claim 70, Appellants specifically argue that Dunkley fails to disclose the controller means for controlling a display and for printing a copy of the receipt with the signature.

Lastly, Appellants assert that neither Dunkley nor Iggulden is directed to similar purposes as those of Appellants' invention and accordingly any suggestion for the combination of the references in the manner suggested by the Examiner comes from the instant patent application and not from any suggestion in the references.

In the rejection⁵ the Examiner asserts that claim 17 and its dependent claims are obvious over Dunkley in view of Iggulden, noting that sections (e) and (g) of claim 17 are not disclosed by Dunkley, but asserts that section (f) of claim 17 is disclosed at column 3, lines 57-59 of Dunkley.

As regards section (e) of claim 17 the Examiner also asserts⁶ that it was unnecessary for Dunkley to display the

⁵Paper No. 23, at pages 5-8.

⁶See also the answer at page 4.

business form on the touch sensitive display as it affixed a paper charge form to the surface of a touch sensitive screen, and customer account data, merchant data and charges are printed on the charge slip. He further states that Iggulden teaches that pre-established forms can be displayed for data insertion by a user. The Examiner then applies *In re Venner*⁷, quoting "it is well settled that it is not "invention" to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the same result" to obviate the replacement of the charge slip on a digitizing pad with automatic means of displaying the form on a touch sensitive pad.

As to section (g) of claim 17, the Examiner asserts that it is a well known fact in computer science education and training, as well as database design and usage, that the practice of repeating information which never changes is unnecessary, and this also applies to repeated information that is transmitted to remote data bases. Based thereon the Examiner finds it obvious to communicate the combined business form and signature information to a storage medium for later retrieval.

⁷*In re Venner and Bowser*, 262 F.2d 91, 46 CCPA 754, 120 USPQ 192 (CCPA 1958).

In the answer⁸ the Examiner argues that the motivation for modifying Dunkley with the teachings of Iggulden is to reduce the potential for improper placement or inadvertent movement of the credit slip on the Dunkley device, thereby preventing incomplete signatures and digitization. The entry of data on a pre-established displayed form directly on the screen as taught by Iggulden thus prevents this inherent design problem of Dunkley.

The Federal Circuit states that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." ***In re Fritch***, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992), ***citing In re Gordon***, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." ***Para-Ordnance***, 73 F.3d at 1087, 37 USPQ2d at 1239, ***citing W. L. Gore & Assocs.***, 721 F.2d at 1551, 1553, 220 USPQ at 311, 312-13. In addition, our reviewing court requires the PTO

⁸At page 4

to make specific findings on a suggestion to combine prior art references. *In re Dembiczak*, 175 F.3d 994, 1000-01, 50 USPQ2d 1614, 1617-19 (Fed. Cir. 1999).

As pointed out by our reviewing court, we must first determine the scope of the claim. "[T]he name of the game is the claim." *In re Hiniker Co.*, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998).

Turning first to Appellants' claim 17, we note that the Examiner admits that sections (e) and (g) are not disclosed by Dunkley. As to section (g) the Examiner asserts that it is a well known fact in computer science education and training, as well as database design and usage, that the practice of repeating information which never changes is unnecessary, and this also applies to repeated information that is transmitted to remote databases. Based thereon, the Examiner found it obvious to one of ordinary skill in this art to communicate the combined business form and signature information to a storage medium for later retrieval. This is not well taken.

The premise that as a general rule one skilled in the computer science art would not repeat information which is repetitive is contrary to general practice. With relatively

inexpensive substantial amounts of memory available for computers such as those disclosed by Appellants and the applied references, it was the norm to record complete separate records.

One important indicium of non-obviousness is "teaching away" from the claimed invention by the prior art. *In re Dow Chemical Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1532 (Fed. Cir. 1988), *In re Bell*, 991 F.2d 781, 784, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993). Here, Iggulden teaches away from communicating and storing the combined form and signature data for later retrieval as it separately transmits each document through the transmission line to a "FAX" after completion of the individual transaction.

Furthermore, the Examiner's contention that replacing the charge slip on a digitizing pad of Dunkley by the touch sensitive form display screen is obvious because it merely provides an automatic means to replace a manual activity (the paper sales-docket) used in the prior art to accomplish the same result is not supported in this case. Without deciding the validity of the proposition for which the Examiner cites *Venner*⁹, the incorporation of the write input device with a touch sensitive

⁹Id. at 6.

display screen which displays both the form and signature, and stores the combination for later retrieval, operates in a manner substantially different from the activity of an operator who manually processes the paper system of Dunkley.

These findings regarding section (g) of claim 17 apply equally to section (k) of claim 27, section (h) of claim 78, the fifth subparagraph of claim 84, subsection (d) of claim 91, subsection (e) of claim 93, and the last subparagraphs of claims 102 and 112. Except for claim 70, these are all of the independent claims before us.

As to claim 70, Appellants argue and the Examiner agrees that Dunkley fails to disclose the controller means for controlling a display and for printing a copy of the receipt, including the signature. The Examiner contends that such disclosure by Dunkley is unnecessary since a paper charge form is attached to the upper surface of the touch sensitive screen and the customer receives at least a portion of it. The Examiner notes that Iggulden teaches printing the transaction and signature via a printer.

The claim limitation "controller means for controlling a display of a receipt . . . and for printing a copy of the receipt" is written in means-plus-function language because it

recites a means for performing a specified function without the recital of structure to perform the claimed function. See 35 U.S.C. Section 112, Para. 6 (1994); **Cole v. Kimberly Clark Corp.**, 102 F.3d 524, 531, 41 USPQ2d 1001, 1006 (Fed. Cir. 1996) ("To involve [Section 112, Para. 6], the alleged means-plus-function claim element must not recite a definite structure which performs the described function.") The proper construction of a means-plus-function claim limitation requires interpreting the limitation in light of the corresponding structure, material, or acts described in the written description, and equivalents thereof, to the extent that the written description provides such disclosure. **See In re Donaldson Co.**, 16 F.3d 1189, 1193, 29 USPQ2d 1845, 1848 (Fed. Cir. 1994) (in banc). Structure disclosed in the written description is "corresponding" to the claimed means under Section 112, Para. 6 if the structure is linked by the written description or the prosecution history to the function recited in the claim. **See B. Braun Medical, Inc. v. Abbott Labs.**, 124 F.3d 1419, 1424, 43 USPQ2d 1896, 1990 (Fed. Cir. 1997); **see also Chiuminatta Concrete Concepts v. Cardinal Indus., Inc.**, 145 F.3d 1303, 1308, 46 USPQ2d 1752, 1755-56 (Fed. Cir. 1998).

Although the Examiner noted¹⁰ that he performed the requisite 35 U.S.C. § 112, sixth paragraph analysis wherever means-plus-function language appears in the claim, no specific analysis is provided for this claim or this limitation in any other claim. Appellants have not addressed this issue.

The specific function associated with the means limitation is controlling a display of a receipt for a transaction on said display of said write input device and for printing a copy of the receipt including a signature.

The only structure disclosed¹¹ for implementing the aforesaid function of the "controller means" is a personal computer with a graphics adapter and an adapter board for additional serial ports for communications.

The means-plus-function clause is construed as limited to the corresponding structure disclosed in the specification and equivalents thereof. As admitted by the Examiner, the Dunkley controller is not capable of performing the claimed function and thus cannot be corresponding structure or an equivalent thereof. ***Pennwalt Corp. v. Durand-Wayland, Inc.***, 833 F.2d 931, 4 USPQ2d

¹⁰Paper number 23, at page 4.

¹¹Specification, page 8, lines 15-37 and page 9, lines 1-2.

1737 (Fed. Cir.1987), **cert. denied**, 484 U.S. 961 (1988). The controller of Iggulden does not control a display of a receipt for a transaction on the display, as it only displays the prompting text and input data on a three line display, and not the receipt. Therefore the controller of Iggulden does not perform the same function as the "controller means" as claimed by Appellants.

Furthermore, the controller of Iggulden is in his Key-Fax device and is not disclosed to be a PC with a graphics adapter and an adapter board with serial communication ports. In fact, as the processor of Iggulden drives the limited display function required by Iggulden¹² and communicates with few devices, it does not require the graphics adapter and additional communication ports of Appellants' "controller means".

In addition to the aforesaid analysis under 35 U.S.C. § 112, sixth paragraph, the Examiner's position fails to account for the further claim limitations that the controller is coupled to the point of sale terminal, the display of the write input device, to the digitizer of the write input device, and to the storing means. The references simply fail to provide for a

¹²See figures 14-17.

controller coupled to all these claimed devices.

We are not inclined to dispense with proof by evidence when the proposition at issue is not supported by a teaching in a prior art reference or shown to be common knowledge of unquestionable demonstration. Our reviewing court requires this evidence in order to establish a ***prima facie*** case.

In re Piasecki, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984); ***In re Knapp-Monarch Co.***, 296 F.2d 230, 232, 132 USPQ 6, 8 (CCPA 1961); ***In re Cofer***, 354 F.2d 664, 668, 148 USPQ 268, 271-72 (CCPA 1966). Furthermore, our reviewing court states in ***In re Piasecki***, 745 F.2d 1468, 223 USPQ 785, 788 (Fed. Cir. 1984) the following:

The Supreme Court in ***Graham v. John Deere Co.***, 383 U.S. 1 (1966), focused on the procedural and evidentiary processes in reaching a conclusion under Section 103. As adapted to ex parte procedure, Graham is interpreted as continuing to place the "burden of proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under section 102 and 103". ***Citing In re Warner***, 379 F.2d 1011, 1020, 154 USPQ 173, 177 (CCPA 1967).

Therefore, we will not sustain the rejection of claims 17, 19-24, 26, 27, 53-60 and 70-118 under 35 U.S.C. § 103 as being unpatentable over Dunkley when taken with Iggulden. In addition,

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we will not sustain the rejection of claims 119-123 under 35 U.S.C. § 103 as being unpatentable over Dunkley when taken with Iggulden and Johnston, as Johnston does not provide the claim limitations found absent in the above analysis of their respective parent claims 17, 27, 78, 84 and 91, and the Examiner has only applied Johnston to the specific limitations added by these dependent claims.

We have not sustained the rejection of claims 17, 19-24, 26, 27, 53-60 and 70-123 under 35 U.S.C. § 103. Accordingly, the Examiner's decision is reversed.

REVERSED

KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
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MICHAEL R. FLEMING)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
JOSEPH L. DIXON)	
Administrative Patent Judge)	

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MRF:pgg
Paul W. Martin
AT&T Global Information Solutions
Law Department, ECD-2
101 W. Schantz Avenue
Dayton, Ohio 45479-0001